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ABSTRACT

Developed by the ABCs of Construction National Workplace Literacy Project, this fifth-grade level module teaches different kinds of vocabulary words encountered in work-related texts used by pipefitter trainees. The module covers the following topics: differences between general, specialized, and technical words; learning new words; drills for remembering new words; tips for building vocabulary; and some dictionary use. Twelve exercises are provided. (YLB)

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Specialized, & Technical Terms

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MODULES OF INSTRUCTION DEVELOPED IN GRANT CYCLE

1. Writing Frames for Construction Workers (10 exercises)

for low-level readers; consists of 10 "paragraphs" with open-ended sentences for workers to complete and recopy in their notebooks. Topics deal with work and training, such as "My Job," "Classroom Behavior," and "Listening to Myself."

2. Writing About Your Craft (10 topics)

for all students; list of 10 topics, such as "My Boss," "The Main Beef About My Job," and "How Work Orders Are Delivered." Used for integrating reading and writing in a job-specific context.

3. Building Workplace Vocabulary for E & I: Structural Analysis (80 pages)
Building Workplace Vocabulary for Millwrights: Structural Analysis(79 pages)
Building Workplace Vocabulary for Pipefitters: Structural Analysis(79 pages)

5th grade level; teaches word attack skills for technical terms, utilizing word parts and root words; includes hints for retaining meanings by building card file with visual representations of terminology.

4. Building Workplace Vocabulary for E & I: General, Specialized, & Technical Terms (58 pages)
Building Workplace Vocabulary for Millwrights: General, Specialized & Technical Terms (29 pages)
Building Workplace Vocabulary for Pipefitters: General, Specialized, & Technical Terms (32 pages)

5th grade level; teaches different kinds of vocabulary words encountered in work-related texts; drills for remembering new words; tips for building vocabulary; some dictionary use.

5. Building Workplace Vocabulary for E & I: Compound Words (28 pages)
Building Workplace Vocabulary for Pipefitters: Compound Words (18 pages)
Building Workplace Vocabulary for Millwrights: Compound Words (22 pages)

5th grade level; strategies for finding the meanings of compound words used in technical writing; works with words in context

6. Improving Listening Skills: Hazards Communication (18 pages)
Improving Listening Skills: Fire Extinguishers (22 pages)

a viewing, study guide that accompanies a commercial training video used in the required 8-hour OSHA safety course; learning new words, main ideas, and drawing conclusions are covered.

7. Measuring Decimals: Millwright (28 pages)

instruction and application problems

8. Improving Study Skills/Test Taking (60 pages)

6th grade level; good study skills are needed for success in the ABC Training program; explores strategies for organizing class notes and study time; analysis sheet for determining weaknesses in test preparation; how to schedule to arrange study time and work time

Computer Program

"Math for Pipefitters" is an interactive, multi-media program that covers fractions, decimals, angles, and right triangle geometry in a pipefitting context (88 screens)

PIPEFITTER/GENERAL 57 PAGES

<F1: Help>

Statistics for: B:\PIPEGEN.DOC

Readability Statistics

Flesch Reading Ease:	76	Flesch-Kincaid Grade Level:	5
Gunning's Fog Index:	8		

Paragraph Statistics

Number of paragraphs:	637	Average length:	0.7 sentences

Sentence Statistics

Number of sentences:	464	Short (< 12 words):	451
Average length:	8.6 words	Long (> 30 words):	1
End with '?':	144		
End with '!':	0		

Word Statistics

Number of words:	4220	Average length:	4.26 letters
		Syllables per word:	1.44

<Enter: Next Screen> <Esc: Done>

<F1: Help>

Document Summary for: B:\PIPEGEN.DOC

Readability Statistics	Interpretation
Grade level: 5 (Flesch-Kincaid)	Easy for most readers.
Reading ease score: 76 (Flesch)	This represents 6 to 10 years of schooling.
Avg. sentence length: 8.6 words	May indicate choppiness or lack of sentence variation. Try varying sentence length.
Avg. word length: 1.44 syllables	Most readers could understand the vocabulary used in this document, based on syllables per word.
Avg. paragraph length: 0.7 sentences	Avoid 1-sentence paragraphs in business or technical writing.

<Enter: First Screen> <Esc: Done>

BUILDING WORKPLACE VOCABULARY FOR PIPEFITTERS: GENERAL, SPECIALIZED, & TECHNICAL WORDS

OBJECTIVE: To learn the differences between general, specialized, and technical words.

Think about the tools you use. Some, like wrenches, are tools that all sorts of people use every day. An example of such a tool might be a ball peen hammer. Others are not so common. Still other tools are used only by pipefitters. Words are like this, too. **GENERAL VOCABULARY WORDS** are those words that all people use. These are words like ***pretty, force,*** and ***side***. **SPECIALIZED VOCABULARY WORDS** are regular words used in special ways. ***Flush, thread,*** and ***elbow*** are examples of specialized vocabulary. **TECHNICAL VOCABULARY WORDS** are those that people in only one profession use. Words like ***wye, die stock,*** and ***slurry*** are technical terms. Your text contains examples of all types of vocabulary. So, you'll need practice at finding and remembering the meanings of all of them. Lessons in the TDC relate to your job as a pipefitter. When you work with new words, you take the first step in remembering them.

Unlike tools, people give you words every day. Some are words you know. Others are new to you. How well you know a word depends on how many times you've read or heard it. Look at Table 1 on page 4. This shows that knowledge of words ranges from knowing nothing to exact understanding (Dale, 1958). These stages help you decide what you know about a word. They also tell you what else you need to learn about it.

You use these stages before, during, and after reading. To help you get ready to read, see if your text lists terms. This list might come before or after the reading. If your text has a list, rate your knowledge of the terms. This way you learn how much you know and what you need to learn. As you read, rate the new words you meet. Rate **0** the words you have never seen or heard. Rate **1** the words you have seen or heard, but are unsure of their meanings. Rate **2** the words you can generally define. Rate **3** the words you know and use. Write down words you need to learn. After reading, check your list again. Have any of your ratings changed? Remember, your goal is to make words you ranked first as ***0's and 1's, into 2's or 3's.*** How do you do this?

You add to your vocabulary by finding the meanings of new words. You can do this in one of four ways. The easiest way is to ask someone. Or, you could look in a dictionary. These ways don't always work, however. Why? When you read, you are sometimes alone. Also, there are times when you read without a dictionary handy. Thus, you need ways for finding word meanings that depend on nothing but you. One such method is **CONTEXT**. This means you use words around the unknown word to help you define it. People use context to learn new words more than any other way. But, other methods do exist. A second independent way to define

words is to break unknown words into parts. First, you find out what the parts mean. Then you add them together to find out the meaning of the new word. Sometimes these words are **COMPOUND WORDS**. Compound words are larger words. They are formed by two smaller words. Sometimes you use **STRUCTURAL ANALYSIS.** This is another way of using word parts. Lessons on compound words in pipefitting are in this lab. So are lessons on structural analysis. Once you find the meaning of a new word, you need to remember it. Help for doing so follows in this unit.

LEARNING NEW WORDS

One way to learn new words involves using a **WORD FILE**. To make a word file, you use index cards and a small card file box with alphabetical or subject tabs. Old-fashioned word cards contained the word on the card's front. The meaning appeared on the back. Newer, more helpful word cards take more work. They help you connect what you already know with the new word. This helps you remember it. What do these new cards involve?

First, write the new word on the card. As you write the word, be sure you say it correctly. While saying the word, try to think what the word means to you. Next, you record one of these thoughts on your card. Under the word, draw a picture that best shows the word's meaning. Third, divide the back of the card into fourths. Write the meaning of the word in one fourth. In a second fourth, you list words that mean the same thing as the new word. In the third, you list words that mean the opposite of the new word. Finally, you write a sentence with the new word in the last fourth. Table 2 contains an example of such a word card. Reviewing the cards in your word file helps "lock" new words into your memory.

TABLE 1

STAGES OF VOCABULARY DEVELOPMENT

Stage	Meaning
3	You know the word's meaning and can use it in a sentence.
2	You recognize the word and can define it in general terms.
1	You recognize the word but can't define it or use it.
0	You know the word is new to you.

EXERCISE 1

Examine the words below. Rank your knowledge of them based on Table 1. These words are taken from the first year pipefitting curriculum.

_____	1. ream	_____	11. aqueduct
_____	2. corrosion	_____	12. lanyard
_____	3. goggles	_____	13. shields
_____	4. hard hat	_____	14. sterilized
_____	5. valves	_____	15. plumb
_____	6. torque	_____	16. verticality
_____	7. circumference	_____	17. grinders
_____	8. free-wheeling	_____	18. alloy
_____	9. die	_____	19. flange
_____	10. lateral	_____	20. cryogenic

TABLE 2

EXAMPLE OF WORD CARD

Front of Card

torque

Back of Card

twisting motion	twist tight
He torqued the bolt.	loose free easy

TIPS FOR REMEMBERING NEW WORDS.

It would be easier if you only needed one set of words in life. You could just get a list and learn it. There is one bad thing about this, however. You'd have a very limited vocabulary. Changes in life (jobs, friends, hobbies, interests, current events) require you change the words you use. It doesn't matter how you find the meanings of words. It doesn't matter how you learn those meanings. It only matters that you do. Table 3 contains some hints to build your vocabulary.

TABLE 3

HINTS FOR VOCABULARY DEVELOPMENT

1. When you see a new word, try to find its meaning. Use context, its structure, or compound words to define it. Look it up in a dictionary only after you have tried these.

2. Limit the number of new words you try to learn each day. Your mind can learn only so many daily. You add needless stress to life when you overwork your memory.

3. Be certain you say the word correctly. You need to check pronunciation in a dictionary. You could also ask someone how to say the word. Having once learned it wrong makes it hard for you to change.

4. Once you know a word, it's yours. Don't be afraid to use it.

EXERCISE 2

Bob is welding a piece of pipe. He finds a weld defect on the inside of the pipe. He plans to add a backring. He remembers this from his text. He decides to use a Type C ring.

> Type C. The nubs in this type of backing ***ring*** are actually part of the ring itself and, therefore, cannot be removed prior to welding. They are used in situations where the high-low between the ***fitting*** is close.

1. What does the word ***ring*** mean in the first sentence of this paragraph?

_____

_____

2. Do you know another meaning for ***ring?*** If so, write it on the line below. Use a dictionary if you want.

_____

_____

3. Is ***ring*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

_____

4. What does the word ***fitting*** mean in the last sentence of this paragraph?

_____

5. Do you know another meaning for ***fitting?*** If, so, write it on the line below. Use a dictionary if you want.

_____

6. Is ***fitting*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

❖

EXERCISE 3

Maria needs to cut steel pipe on the job tomorrow. She will be using an oxy-acetylene flame cutter. She wants to look over the steps in its use tonight. She wonders what the text means when she gets to step 3.

> 3. ***Crack*** each ***cylinder*** valve to blow out any dirt or debris that may have accumulated within.

1. What does the word ***crack*** mean in the first sentence of this paragraph?

_____

_____

2. Do you know another meaning for ***crack?*** If so, write it on the line below. Use a dictionary if you want.

_____

_____

3. Is ***crack*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

4. What does the word ***cylinder*** mean in the first sentence of this paragraph?

_____

_____

5. Do you know another meaning for ***cylinder?*** If so, write it on the line below. Use a dictionary if you want.

_____

6. Is ***cylinder*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

7. What does the text mean when it says to **"crack"** the cylinder?

_____

_____

❖

EXERCISE 4

Marco works at a local refinery. He is laying pressurized steam line. He wants to review what his text says about flanged valves.

> Valves also come with flanged ends. These provide ***joints*** that are stronger, tighter, and more leakproof than ***threaded*** joints. Flanged ends do require special end preparation, as well as special ***gaskets***, bolts, and nuts.

1. What does the word ***joints*** mean in the second sentence of this paragraph?

_____

_____

2. Do you know another meaning for ***joints?*** If so, write it on the line below. Use a dictionary if you want.

_____

3. Is ***joints*** an example of general, specialized, or technical vocabulary? Circle your response.

   a. general b. specialized c. technical

   How do you know?

_____

_____

4. What does the word ***threaded*** mean in the second sentence of this paragraph?

_____

_____

5. Do you know another meaning for ***threaded?*** If so, write it on the line below. Use a dictionary if you want.

_____

6. Is ***threaded*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

7. What does the word ***gaskets*** mean in the last sentence of this paragraph?

_____

_____

8. Do you know another meaning for ***gaskets?*** If so, write in on the line below. Use a dictionary if you want.

_____

_____

9. Is ***gaskets*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

❖

EXERCISE 5

Juan works with 18-inch diameter pipe. He needs to tack weld a plate on it. He's had trouble keeping the pipe steady. His boss tells him to "chock" it. Juan wonders if there is a way to know how many chocks he needs. He remembers this:

> Pipes placed on blocks require wedges to keep them from rolling off the blocking. Large ***diameter*** pipe require ***chocks*** to keep it from rolling. Chock is the name given to a block placed on the sides of a circular object to keep it from rolling. The general rule of thumb regarding chocks is that there should be one inch of chock per one foot of diameter. Thus, a 42-inch pipe requires about a 3½" thick chock.

1. What does the word ***diameter*** mean in the second sentence of this paragraph?

2. Do you know another meaning for ***diameter?*** If so, write it on the line below. Use a dictionary if you want.

_____

3. Is ***diameter*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

4. What does the word ***chocks*** mean in the second sentence of this paragraph?

_____

_____

5. Does ***chocks*** have another meaning? If so, write it on the line below. Use a dictionary if you want.

_____

6. Is ***chocks*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

❖

EXERCISE 6

Sal is putting in a new extension to the existing sewer main. Sal knows the waste has to flow without trouble. Thus, the slope of the pipe is very important. Sal's boss tells Sal to look at the pipe's profile. Sal knows what to do. He remembers what his text said:

> Elevation drawings for the ***run*** of pipe show the ***grade*** and ***depth*** of cover. This information about a pipeline is called a ***profile***.

1. What does the word ***run*** mean in the first sentence of this paragraph?

2. Can **run** mean something else? If so, write in on the line below. Use a dictionary if you want.

_____

3. Is ***run*** an example of general, specialized, or technical vocabulary? How do you know?

_____

4. What does the word ***grade*** mean in the first sentence of this paragraph?

_____

_____

5. Do you know another meaning for ***grade?*** If so, write in on the line below. Use a dictionary if you want.

_____

6. Is ***grade*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

7. What does the word ***depth*** mean in the first sentence of this paragraph?

_____

_____

8. Can ***depth*** mean anything else? If so, write it on the line below. Use a dictionary if you want.

_____

9. Is ***depth*** an example of general, specialized or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

10. What does the word ***profile*** mean in the second sentence of this paragraph?

_____

_____

11. Does ***profile*** have another meaning? If so, write it on the line below. Use a dictionary if you aren't sure.

_____

_____

12. Is ***profile*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

❖

EXERCISE 7

Yolanda is putting in pipe under the new loading dock area. She is using reinforced concrete pipe. She wonders how concrete pipe is made stronger. Her text tells her this:

> Concrete ***pipe*** is made in molds. Machine processes and conventional casting processes are used to manufacture concrete pipe. If the pipe is to be reinforced, a steel pipe is placed inside the ***mold***. This ***cage*** may be either a single circle or concentric circles, depending on the desired strength of the finished pipe.

1. What does the word ***pipe*** mean in the first sentence of this paragraph?

2. Can you think of another meaning for **pipe**? If so, write in on the line below. Use a dictionary if you want.

_____

3. Is ***pipe*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

4. What does the word ***mold*** mean in the third sentence of this paragraph?

_____

_____

5. Does ***mold*** have another meaning? If so, write in on the line below. Use a dictionary if you want.

_____

6. Is ***mold*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

7. What does the word ***cage*** mean in the third sentence of this paragraph?

_____

_____

8. Do you know another meaning for ***cage*** ? If so, write it on the line below. Use a dictionary if you want.

_____

_____

9. Is ***cage*** an example of general, specialized or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

❖

EXERCISE 8

A bolt on the machine Julie needs has stripped. She needs to cut new threads. She has had trouble before moving the throwout lever. She checks her textbook. She reads this information:

> Lift ***tongue*** of clamp lever ***washer*** up out of slot under the ***size*** bar. Slide throwout ***lever*** all the way to the end of the slot in the **OVER** direction indicated on the size bar.

1. Think about the word ***tongue***. What does it mean in pipefitting?

_____

_____

2. Do you know another meaning for ***tongue***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

_____

_____

_____

3. Is ***tongue*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

4. Think about the word ***washer***. What does it mean in pipefitting?

_____

_____

5. Do you know another meaning for ***washer***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

_____

_____

_____

6. Is ***washer*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

7. Think about the word ***size***. What does it mean in pipefitting?

_____

_____

8. Do you know another meaning for ***size***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

_____

_____

_____

9. Is ***size*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

10. Think about the word ***lever***. What does it mean in pipefitting?

11. Do you know another meaning for ***lever***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

12. Is ***lever*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

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EXERCISE 9

It's been much colder than usual. A pipe at the refinery burst. Paulo needs to replace the broken section. He needs to cut a piece of pipe. He has cut the pipe too short in the past. Paulo decides to read about measuring pipe. He checks his textbook. This is what he reads:

> Common sense should tell you that if you cut a length of pipe 18″, then ***thread*** it and screw it into these ***elbows***, the ***distance*** between the fittings would not be 18″ when you were finished.
>
> Why? Because a certain amount of the pipe enters each fitting. The amount that enters each fitting must be added to the overall length of the straight pipe. This amount is the make-up or the thread ***engagement***.

1. Think about the word ***thread***. What does it mean in pipefitting?

_____

_____

2. Do you know another meaning for ***thread***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

_____

_____

_____

3. Is ***thread*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

4. Think about the word ***elbow***. What does it mean in pipefitting?

_____

_____

5. Do you know another meaning for ***elbow***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below>

_____

_____

_____

6. Is ***elbow*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

7. Think about the word ***distance***. What does it mean in pipefitting?

_____

_____

8. Do you know another meaning for ***distance***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

_____

_____

_____

9. Is ***distance*** an example of general, specialized, or technical vocabulary? Circle your response.

   a. general b. specialized c. technical

   How do you know?

   _____

   _____

10. Think about the word ***engagement***. What does it mean in pipefitting?

    _____

    _____

11. Do you know another meaning for ***engagement***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

_____

_____

_____

12. Is ***engagement*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

❖

EXERCISE 10

Some pipe needs to be re-routed to a new boiler. Lee plans to make a 90 degree turn on the pipes. He cannot decide whether to use a tee or a saddle. He checks his text and finds:

> Tees make 90 degree ***branches*** from a ***run*** of pipe. they may be either straight or reducing. Tees are sized by listing the dimensions straight through the tee and then listing the branch.
>
> ***Saddles*** serve the same purpose as tees but they are welded into an opening cut into a straight length of pipe. Wrap-around saddles are used to provide extra reinforcement to the branch ***connection***.

1. Think about the word ***branches***. What does it mean in pipefitting?

_____

_____

2. Do you know another meaning for ***branches***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

_____

_____

_____

3. Is ***branches*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

4. Think about the word ***run***. What does it mean in pipefitting?

_____

_____

5. Do you know another meaning for ***run***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below>

_____

_____

_____

6. Is ***run*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

7. Think about the word ***saddle***. What does it mean in pipefitting?

_____

_____

8. Do you know another meaning for ***saddle***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

_____

_____

_____

9. Is ***saddle*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

10. Think about the word ***connection***. What does it mean in pipefitting?

11. Do you know another meaning for ***connection***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

12. Is ***connection*** an example of general, specialized, or technical vocabulary? Circle your response.

    a. general b. specialized c. technical

    How do you know?

    _____

    _____

13. How are tees and saddles alike?

    _____

    _____

14. How are tees and saddles different?

    _____

    _____

❖

EXERCISE 11

Freddie needs to put a 3-inch branch off the main gas line. He wants to either use a socket-weld or a butt-weld. His text tells him the following information:

> Socket-welded pipe is easier to align than butt-welded pipe, especially on lines 4 inches and smaller. Because only the ***circumferences*** of the pipe is welded, no weld metal can enter the ***bore***. The resulting joint is leakproof, if properly made..

1. Think about the word ***circumferences***. What does it mean in pipefitting?

2. Do you know another meaning for ***circumferences***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

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_____

_____

3. Is ***circumferences*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

_____

_____

4. Think about the word ***bore***. What does it mean in pipefitting?

_____

_____

5. Do you know another meaning for ***bore***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below>

_____

_____

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6. Is ***bore*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

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EXERCISE 12

A water valve at the refinery needs replacing every month or so. Mark checks it. It does not have a union on either side of it. He thinks adding them would be a good idea. He checks his text for more information.

> The ***union*** is used primarily for installation and maintenance of ***valves*** and other fittings that may require replacement. The ***joint*** itself is a screwed joint. When installing a union in a socket-welded system, the union should be screwed tightly before any welding is done. This minimizes the warping of the ***seat*** that may occur due to the heat input of the welding process.

1. Think about the word ***union***. What does it mean in pipefitting?

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2. Do you know another meaning for ***union***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

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3. Is ***union*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

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4. Think about the word ***valve***. What does it mean in pipefitting?

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5. Do you know another meaning for ***valves***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below>

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6. Is ***valves*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

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7. Think about the word ***joint***. What does it mean in pipefitting?

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8. Do you know another meaning for ***joint***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below.

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9. Is ***joint*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?

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10. Think about the word ***seat***. What does it mean in pipefitting?

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11. Do you know another meaning for ***seat***? If so, write this meaning on the lines below. If not, check a dictionary to see if there is one. If so, write the meaning on the lines below>

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12. Is ***seat*** an example of general, specialized, or technical vocabulary? Circle your response.

a. general b. specialized c. technical

How do you know?